

REMARKS

The Examiner rejected claims 1-6 and 8 under 35 USC 102(b) as being anticipated by Viehweger, Jr. (US Patent 3,077,120). The Examiner also rejected claims 7-9 and 21 under 35 USC 103(a) as being unpatentable over Viehweger, Jr. in view of Grace (US Patent 2,875,980).

Applicant submits that the landing gear system of the present invention is clearly distinguishable from the cited references. Landing gear 10 of the present invention includes a pair of vertically adjustable lifts 17 which are driven by a pair of transverse drive shafts 32 which rotate about a common axis 54. Each drive shaft 32 is directly coupled to a respective rotational output 36 of a hydraulic motor 34 via a coupler 38. Rotational outputs 36 are rotatable about axis 56 in order to drive drive shafts 32 to vertically adjust lifts 17. Thus, rotational outputs 36 and drive shafts 32 are rotatable about common axis 54/56. Each rotational output 36 extends from hydraulic motor 34 respectively from opposed sides of the housing of motor 34. The direct connection between drive shafts 32 and rotational outputs 36 allows the system to be free of gears, chains, sprockets and other adapters for translating rotational motion of rotational outputs 36 to drive shafts 32. Hydraulic motor 34 is mounted to frame 26 of trailer 12 via a mounting assembly 35 which is free of moving parts. Thus, the landing gear of the present invention is far simpler in configuration than the cited references and eliminates a substantial number of moving parts, including gears, chains, sprockets and other similar structures.

As noted above, the Examiner rejected claims 1-6 and 8 under 35 USC 102(b) as being anticipated by Viehweger, Jr. (US Patent 3,077,120).

In establishing a prima facie case of anticipation under 35 USC § 102, the Examiner must find every element of the applicant's claim in a single reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987). Other references may be used only to interpret the allegedly anticipated reference. Studiengesellschaft Kohle, m.b.H. v. Dart Industries, Inc., 726 F.2d 724,

220 USPQ 841 (Fed. Cir. 1984). This idea was similarly upheld in Scripps Clinic & Research Foundation v. Genentech, Inc., 927 F. 2d. 1565, 18 USPQ2d. 1896 (Fed. Cir. 1991), wherein the Court held that, "Invalidity for anticipation requires that all of the elements and limitations of the claims are found within a single prior art reference."

Applicant respectfully disagrees with the Examiner's rejection of claim 1, but has amended claim 1 to clarify the distinction between Applicant's invention and Viehweger, Jr. As originally drafted, claim 1 recited in part "a hydraulic motor having a pair of rotational outputs". While Applicant believes that this language is clear and indicates that the rotational outputs are a part of the hydraulic motor, claim 1 has been amended to indicate that the rotational outputs extend outwardly directly from the hydraulic motor, thus clarifying the location of the rotational outputs with respect to the motor. Even without this amendment, Applicant submits that claim 1 clearly defines over Viehweger, Jr., which includes a hydraulic motor 94 with only a single rotational output 92. Since Viehweger, Jr. includes but a single rotational output extending from the hydraulic motor, Applicant submits that claim 1 is allowable. Further, Viehweger, Jr. includes a substantial assembly of moving parts for translating rotational output of hydraulic motor 94 in order to rotate the landing gear drive shafts 29 and 30. In particular, the rotational output 92 is connected to a drive shaft 84 having a gear 82 attached thereto for rotationally engaging an internal ring gear 81 fixedly connected to a drive sprocket 48 which is in turn engaged by a chain 47 in order to drive another sprocket 44 to drive a central section 34 of a drive shaft which is coupled to landing gear drive shafts 29 and 30 via coupling sleeves 40. Internal ring gear 81 and drive sprocket 48 are moveable via a rock arm 56 driven by a motor 69 in order that sprocket 48 may be driven in alternating directions as desired in order to respectively raise or lower the landing gear. Thus, as noted above, the landing gear of Viehweger, Jr. is far more complicated than that of Applicant's invention and clearly does not provide a hydraulic motor having a pair of rotational outputs extending outwardly directly therefrom. Applicant thus submits

that claim 1 as originally written and as amended is allowable. Applicant thus submits that claims 2-6 and 8 are allowable as depending from an allowable claim.

With further regard to claim 2, Applicant submits that Viehweger, Jr. cannot teach that each rotational output rotates at a substantially equal rate to vertically adjust the lifts at substantially the same rate because Viehweger, Jr. fails to teach or suggest a hydraulic motor having a pair of rotational outputs. Thus, Applicant submits that claim 2 is allowable in its own right.

With further regard to claim 3, Applicant submits that Viehweger, Jr. fails to teach or suggest a hydraulic motor which further includes a drive shaft to which each rotational output is connected. In addition to the fact that Viehweger, Jr. fails to teach or suggest a hydraulic motor having a pair of rotational outputs, Viehweger, Jr. fails to teach anything further about the hydraulic motor beyond the fact that it has a single rotational output extending therefrom. Therefore, Applicant submits that claim 3 is allowable in its own right.

With further regard to claim 4, Applicant submits that Viehweger, Jr. fails to teach the drive shaft and rotational outputs of the hydraulic motor are formed as an integral one-piece member. Again, it is impossible for Viehweger, Jr. to teach this limitation because Viehweger, Jr. only teaches a single rotational output and discusses nothing about a second rotational output or a drive shaft of the hydraulic motor. Applicant therefore submits that claim 4 is allowable in its own right.

With further regard to claim 6, Applicant submits that Viehweger, Jr. fails to teach or suggest that the landing gear drive shafts each have a longitudinal axis and that the rotational outputs each have their longitudinal axis substantially coaxial with the longitudinal axis of the drive shaft. In addition to the fact that Viehweger, Jr. teaches but a single rotational output 92 of motor 94, even that rotational output 92 is not coaxial with the landing gear drive shafts 29 and 30 of Viehweger, Jr. Therefore, Applicant submits that claim 6 is allowable in its own right.

Inasmuch as Applicant teaches a hydraulic motor having a pair of rotational outputs extending outwardly directly therefrom; that each rotational output rotates at a substantially equal rate to vertically adjust the lift at substantially the same rate;

that the hydraulic motor includes a drive shaft which each rotational output is connected; that the drive shaft and rotational outputs are formed as an integral one-piece member; and that the landing gear drive shafts each have a longitudinal axis which is substantially coaxial with the longitudinal axis of each of the rotational outputs; Applicant submits that the landing gear of the present invention as claimed is patentably distinct from the cited references.

The Examiner also rejected claims 7-9 and 21 under 35 USC 103(a) as being unpatentable over Viehweger, Jr. in view of Grace (US Patent 2,875,980).

The Examiner initially has the burden of factually supporting a *prima facie* conclusion of obviousness, which then shifts the burden of providing evidence for arguments to the Applicant who may submit additional evidence of non-obviousness in order to overcome the Examiner's rejection. MPEP 2142. To establish a *prima facie* case of obviousness, three basic criteria must be met. MPEP 2143. First, there must be some suggestion or motivation to combine the references, the three possible sources of which are the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. MPEP 2143.01, citing In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ 2d 1453, 1457-58 (Fed. Cir. 1998). Second, there must be a reasonable expectation of success in combining the references in order for it to be proper to combine them. MPEP 2143.02, citing In re Merck & Co., Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Third, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03, citing In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

The rationale to modify or combine prior art references may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available to one of the ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. MPEP 2144, citing, for example In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). The strongest rationale for combining references is a recognition, expressly or impliedly in the prior art or drawn from a convincing line of reasoning based on established scientific principles or legal precedence that some advantage or expected beneficial result would have

been produced by their combination. MPEP 2144, citing In re Sernaker, 702 F.2d 989, 994-95, 217 USPQ 1, 5-6 (Fed. Cir. 1983).

Applicant first notes that in light of the above discussion concerning the 102 rejections and the amendment of claim 1, that claims 7-9 are allowable as depending from an allowable claim. Claim 21 has been amended in the same manner as claim 1 whereby claim 21 recites the hydraulic motor has a pair of rotational outputs extending outwardly directly therefrom. Applicant submits that claim 21 as originally drafted was allowable for the same reasons as discussed above with regard to claim 1 and that claim 21 as amended is likewise allowable for the same reasons.

Inasmuch as the landing gear system of the present invention in combination with a trailer and vehicle has a hydraulic motor having a pair of rotational outputs extending outwardly directly therefrom, Applicant submits that the present invention is patentably distinct from the cited references.

Applicant has canceled claims 10-20.

Applicant has also added new claims 22-35, including independent claim 35. Applicant believes that, in light of the above discussion, said new claims recite limitations which are patentably distinct over the cited references, as further detailed below.

Claim 22 depends from claim 1 and recites that the hydraulic motor has a housing from which the rotational outputs project. This further clarifies that the rotational outputs are projecting from a housing of the hydraulic motor itself. Clearly, only a single rotational output projects from the housing of the hydraulic motor 94 of Viehweger, Jr. None of the other references teach or suggest this limitation.

Claim 23 depends from claim 22 and recites that the rotational outputs project respectively from opposite sides of the hydraulic motor housing. This limitation further defines the location of the rotational outputs and clearly defines over the cited references.

Claim 24 depends from claim 1 and recites that the system is free of an adapter for translating rotational output of the hydraulic motor to the landing gear drive shaft. Clearly, Viehweger, Jr. includes a substantial amount of mechanical adaptation in order to translate the rotational output of the hydraulic motor to the landing gear drive shafts. This is true of the other references as well.

Claim 25 depends from claim 1 and recites that the system is free of gears for translating rotational movement of the rotational outputs to the landing gear drive shafts. Again, the cited references clearly utilize gears in order to translate this rotational movement.

Claim 26 depends from claim 1 and recites that the system is free of chains and sprockets for translating rotational movement with the rotational outputs of the landing gear drive shafts. Once again, Viehweger, Jr. specifically uses sprockets and chains to translate this movement and must do so in order for the invention to function properly.

Claim 27 depends from claim 1 and recites that the ratio of rotation of each rotational output to rotation of each respective landing gear drive shaft is 1:1. Viehweger, Jr. in particular uses a variety of gears and various sizes of sprockets in order to reduce the force required by the hydraulic motor 94 in order to turn the landing gear drive shafts. Clearly, the ratio of rotation discussed in claim 27 is not 1:1 for Viehweger, Jr. nor is it for the other cited references.

Claim 28 depends from claim 1 and recites that the system is free of a reduction gear mechanism to translate rotational output of the hydraulic motor to rotation of the drive shafts. As just noted above, the cited references all use a form of a reduction gear mechanism for this purpose.

Claim 29 depends from claim 1 and recites that each landing gear drive shaft is connected directly to the respective rotational output of the hydraulic motor via a coupler. Clearly, the cited references do not teach or suggest this limitation. For example, Viehweger, Jr. teaches but a single rotational output of the hydraulic motor and even that rotational output is not directly connected to the landing gear

drive shaft 29 or 30 but rather is indirectly connected via a series of gears, chains and sprockets noted earlier.

Claim 30 depends from claim 1 and recites that the hydraulic motor is disposed directly between the landing gear drive shafts. Once again, the cited references fail to teach or suggest this limitation, instead showing a motor such as motor 94 of Viehweger, Jr. which is offset substantially from the landing gear drive shafts and therefore cannot be disposed directly between them.

Claim 31 depends from claim 1 and recites that a hydraulic motor is mounted on a trailer via a mounting assembly free of moving parts. Viehweger, Jr. in particular necessarily teaches away from this, having a motor 94 which is mounted to a structure which is full of moving parts.

Claim 32 depends from claim 21 and recites that there is a connection between each landing gear drive shaft and the respective rotational output and that the connection is free of gears. In view of the previous discussions, it is clear that the cited references fail to teach or suggest this limitation.

Claim 33 depends from claim 21 and indicates that the connection between each landing gear drive shaft and respective rotational output is free of sprockets. As discussed above, it is clear that the cited references fail to teach or suggest this limitation.

Claim 34 depends from claim 21 and indicates that the connection between each landing gear drive shaft and the respective rotational output is free of chains. Similar to the previous two claims, it is clear that the cited references fail to teach or suggest this limitation.

Independent claim 35 recites a new combination of elements which Applicant believes to be allowable over the cited references. In particular, there are a pair of rotational outputs projecting from a hydraulic motor, which in and of itself should make the claim allowable. In addition, it is clarified that the rotational outputs are projecting from respective opposed sides of the hydraulic motor, which defines over the cited references. In addition, the rotational outputs are rotatable about a common axis and a pair of landing gear drive shafts are also rotatable about the

same common axis. This also defines over the cited references. Applicant therefore submits that claim 35 is allowable.

Based on the above discussion and amendments, Applicant submits that claims 1-9 and 21-35 are allowable.

In view of the foregoing, the Applicant respectfully requests reconsideration of the claims and most earnestly solicits the issuance of a formal notice of allowability for the claims. Please call the undersigned attorney if any questions remain after this amendment.

Respectfully submitted at Canton, Ohio this 28th day of September, 2004.

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